DOCUMENT RESUME

ED 282 780 SO 017 482

AUTHOR MacAulay, Desmond, Ed.
TITLE Girls in Education.
INSTITUTION Queensland Dept. of Education, Brisbane (Australia).
PUB DATE Nov 84
NOTE 35p.
PUB TYPE Collected Works - Serials (022) -- Reports - General (140)
JOURNAL CIT Quest 38; Nov 1984

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Curriculum Evaluation; Educational Improvement; Educational Innovation; *Educational Opportunities; *Educational Responsibility; Elementary Secondary Education; *Females; Foreign Countries; Role Models; Rural Schools; *School Responsibility; Self Concept; Sex Bias; *Sex Fairness; Sex Stereotypes; Teacher Evaluation; *Womens Education
IDENTIFIERS *Australia

ABSTRACT

Girls are only one of several groups that governments in Australia, as in other parts of the world, have recognized as suffering educational disadvantage. The problems of other groups are clear-cut and appropriate action plainly indicated. But in the case of girls, the causes are far more complex, entrenched in society, and education systems have served only to immobilize girls in their traditional roles. Articles in this issue address some of these issues, each dealing with a different aspect of discrimination. They are: "Taking Girls' 'Disadvantage Seriously'" (Sandra Taylor); "Girls and Mathematics" (Marjorie Carss); "Girls, Sport, and Physical Education" (Viki Rutter); "Against the Laws of Nature" (Reet Howell); "Girls' Needs at Babinda" (Mary Clarke); "Schools, Girls, and Special Needs" (Bernadette Roberts, et al.); "Self-Concept and Role Models" (Claire Stapleton); "Curriculum and the Small Rural School" (Matthew Glen); "Teachers Evaluating Teachers" (Jim Lawson); and "Keeping Innovation Going" (Howard Thomas). (BZ)

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QUEST 38

Department of Education, Queensland

Girls in Education

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Editor: Desmond MacAulay
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Quest is published twice a year and is issued without charge to teachers in State schools and colleges. The opinions expressed by authors do not necessarily reflect views of the Department of Education.

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NOTES FOR CONTRIBUTORS

Teachers, educational administrators and people with a keen interest in educational issues are invited to contribute original articles to *Quest*, the professional magazine for Queensland teachers. Articles should preferably concern an aspect or aspects of preschool, primary, special, secondary or technical education. The approach may be practical or theoretical, but articles should be written to interest the largest possible number of teachers from all sectors of the State's education system.

Articles should be:

- of recent date and not on offer to any other publication;
- between 1000 and 3500 words in length;
- typed double-spaced on one side of the paper, with a wide left-hand margin.

Authors should:

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- follow the style adopted in *Quest* for reference lists and bibliographies;
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Photographs should be black and white prints, and at least 15 by 10 cm. Articles may be subject to editorial revision, but revisions of any consequence will be referred to the author.

CORRESPONDENCE

All correspondence should be directed to the Senior Education Officer, Publishing Services, Production and Publishing Services Branch, Department of Education, PO Box 33, North Quay, Q 4000.

AWE Seminars—Education and Girls

A voluntary organisation, the Association of Women Educators (AWE), is available to help teachers and administrators who are concerned about disadvantage suffered by girls at school. The women—mainly teachers from State and independent schools and from TAFE, and university lecturers—are, as educators, interested in the whole child. They also have a particular interest in the welfare of girls.

For the second half of 1984, the Association has received QINSEC funding to employ a Consultant to co-ordinate its activities, and for a series of regional seminars. The Consultant's basic aim is to promote girls' education by developing community awareness of the needs of girls. She works with teachers from all levels of schooling, and with the children's parents. The involvement of parents is particularly important, since action at school level is unlikely to be really effective unless it receives full support from parents.

Seminar topics include: girl's self-concept; use of sexist language; classroom dynamics; girls and physical activity; and girls and the media. Among the most important sessions are those on classroom dynamics in which the Consultant introduces participants to Dale Spender's basic research which showed that both male and female teachers gave two-thirds of their classroom time to boys. They are also introduced to basic research on children's self-concepts.

Regional directors have supported the seminars, allowing teachers to attend partly in school time as long as their principals approve. Attendances have been good, particularly of women; men have participated in all seminars, though in lesser numbers. Parents have proved enthusiastic and many are keen to help in future activities in their areas.

The seminars give participants a philosophical base for future action and provide them with strategies to use in the classroom. Teachers also receive a folder containing information to read themselves and to pass on to their colleagues.

The Association hopes to obtain further QINSEC funding in 1985. This would allow it to continue employing a Consultant, and to conduct six Leadership Seminars through which people from the regions would be trained to disseminate information and organise their own seminars tailored to local needs. The Consultant would then work with the regions to help them organise in-service programs.

The Consultant can help schools by talking at P&C meetings and staff meetings or by letting them know where information can be obtained. Recently in Gympie, she also worked with Years 6 and 7 pupils and their teachers and spoke to parents in the evening.

Schools wishing to avail themselves of the services offered by the Association may contact: Association of Women Educators, PO Box 84, Spring Hill, Q 4001.

The cover drawing for *Quest* 38 is by Michelle Spratt, a final-year Certificate student in Commercial Art at the Queensland College of Art.

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Girls in Education

Girls are only one of several groups that governments in Australia, as in other parts of the world, have recognised as suffering educational disadvantage. The problems the other groups face are clear-cut. Ethnic minorities, for example, have language and cultural barriers to overcome; while Aborigines are disadvantaged by cultural differences and past serious deprivations. Children in isolated areas may have limited access to services taken for granted in cities; and the disabled have specific handicaps to overcome.

Where the causes of disadvantage are so obvious, the appropriate action is clearly indicated. But in the case of girls, the causes are far more complex and are entrenched in society. Their disadvantage stems not, as was believed in the past, from any biological differences, but from sex-role stereotyping and the assumptions society has made about the perceived abilities and future lives of boys and girls. Education systems have reflected these assumptions in their organisation and their curricula and through teachers' expectations; they have therefore confirmed girls in their traditional roles.

Recent years have, however, seen increasing interest in the position of women, and with it concern about the education of girls.

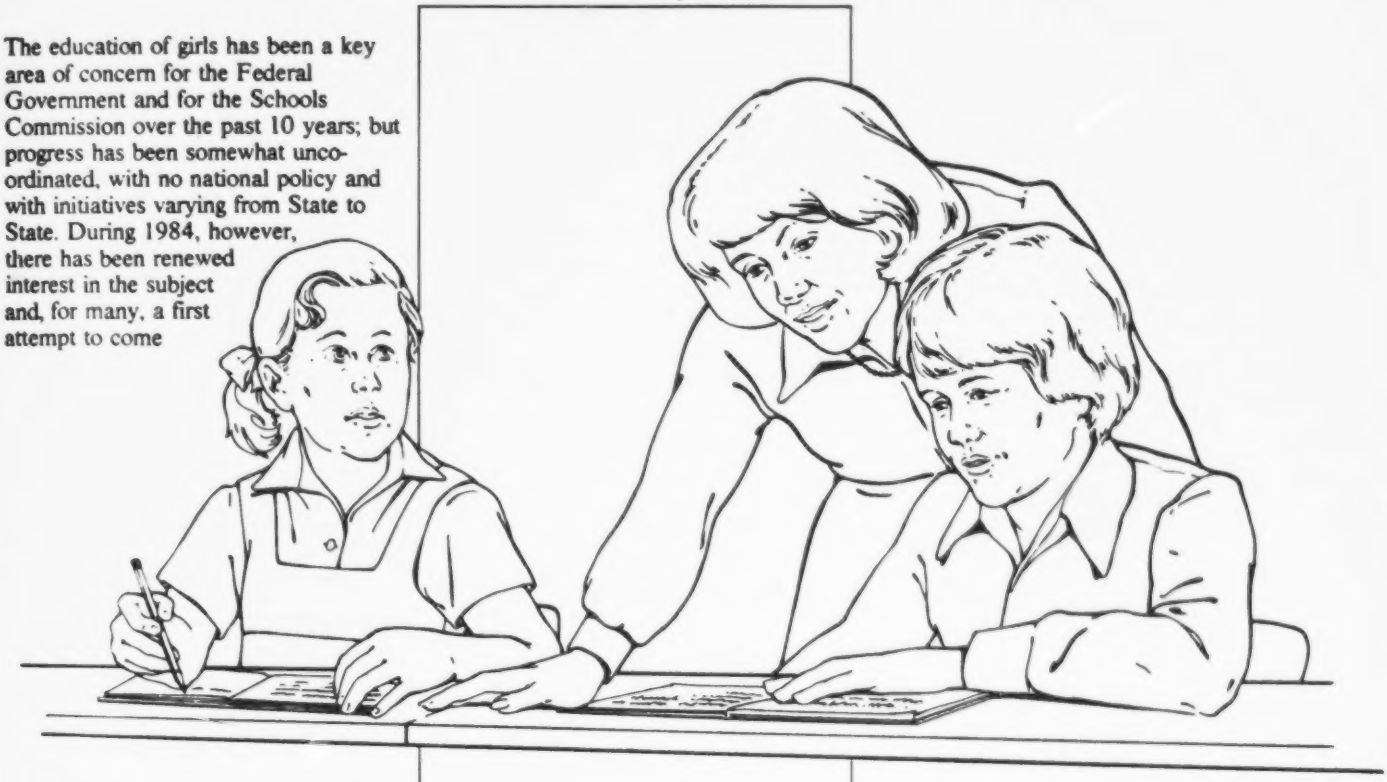
The Queensland Education Department's policy statement, Equality of Opportunity in Education for Boys and Girls, recognises that expectations based on sex alone 'constrain the life-views and experiences of students and are incongruent with the provision of equality of opportunity in education'. It states:

> Schools need to examine the assumptions and values underlying sex-related expectations and the limitations these place on students.
>
> In particular, efforts need to focus upon the analysis and correction of stereotyping in curriculum development and implementation, the selection of resource materials, subject choice and career counselling, discrimination in school and class organisation, and in teacher practices.

Articles in this issue of *Quest* address some of these issues. They come from teachers who are implementing the Department's policy, from lecturers in tertiary institutions, and from the Department's PEP team. Each deals with a different aspect of discrimination. All should help make teachers more aware of the part their own attitudes and actions play in aiding or inhibiting efforts to provide equality of opportunity for all their students.

Taking girls' 'disadvantage seriously

Sandra Taylor



The education of girls has been a key area of concern for the Federal Government and for the Schools Commission over the past 10 years; but progress has been somewhat uncoordinated, with no national policy and with initiatives varying from State to State. During 1984, however, there has been renewed interest in the subject and, for many, a first attempt to come to grips with the complex issues involved. An added impetus has come from the Participation and Equity Program (PEP), which has a central focus on groups with special needs and fostering equal outcomes of schooling. Girls are one of the designated groups with special needs, and equity for girls is a major goal of the program.

Concern with the schooling of girls can be traced back to 1973 when the Karmel Report[1] first made official mention of the educational disadvantage of girls. Then, in 1975, the Schools Commission defined girls as a disadvantaged group. In the same year, its special study group on the education of girls produced its Report, *Girls, School and Society*[2]. The designation of girls as a disadvantaged group was based on criteria such as participation in schooling, retention rates, tertiary participation and educational qualifications. The Report expressed particular concern about sex differences in subject participation and achievement levels, a concern that has been echoed through a number of Schools Commission reports and that has been stressed in the Participation and Equity Program.

A good deal of research evidence has accumulated during the past 10 years which documents the educational levels of girls and the subsequent effects on occupational qualifications and skills and on future life chances. Research studies in Australia, the United Kingdom and the United States have also revealed the ways in which schooling processes have contributed to this structuring of inequalities in society. As understanding about the issues has increased, a number of initiatives have been taken in Australia, both federally and by individual States, to address some of the problems underlying the schooling of girls.

Although policies and programs in the area have resulted in some gains – largely for middle-class girls – the situation for most girls has worsened because of the recession and the resulting unemployment. Technological change and restructuring of the workforce have reduced full-time opportunities in clerical work, factory work, the retail trades and service areas, the traditional avenues of employment for working class girls. Official figures place unemployment among 15- to 19-year-old women at around 23 per cent. But there is also hidden unemployment; for growing numbers of teenage girls cannot be accounted for by

either full-time education, full-time employment or officially recognised unemployment[3]. The evidence suggests, indeed, that hidden unemployment is concentrated among teenage girls to a greater extent than is measured unemployment, a situation which shows the extreme seriousness of the situation for girl school-leavers. Migrant and Aboriginal girls are particularly affected, for these groups are still more likely to leave before completing their secondary schooling.

In general, however, retention rates are no longer a problem. Girls are now more likely than boys to complete their secondary education to Year 12. But a number of studies show that traditional sex differences in subject choices persist; and school subject choice can be an important factor in limiting job opportunities for girls. Fewer girls, for example, continue to study mathematics and science subjects which would widen their career options.

Closely related to subject and career choices is the issue of low self-esteem in teenage girls. Several Australian research studies have found that girls' self-esteem declines during their early teens, while that of boys increases. Because of this low self-esteem, girls may still be considered educationally disadvantaged in comparison with boys, and still warranting particular attention.

In relation to PEP it is important to stress that the goals are *equity* as well as *participation*. There is a very real danger that the disadvantages to girls will be forgotten if the focus is on retention rates alone. But as the PEP document states[4]: 'There is far more to participation than merely staying on at school'.

So what can be done by teachers to address the issues? Schools are only one institution where stereotyping occurs and clearly complex issues are involved. There are no easy answers, but there is now a considerable body of knowledge which indicates where school processes and teachers do contribute to the problem. Teachers' own unexamined assumptions and expectations about the different interests, abilities and likely futures of girls and boys are subtly conveyed in the classroom. Teachers are therefore caught up in the problem itself; they are also crucial in terms of intervention and change. But we now know specific areas where schooling processes may disadvantage girls, and these are areas where change can occur.

The Queensland Policy Statement on Equality of Opportunity in Education for Girls and Boys delineates six areas where stereotyping occurs and which need attention. The six areas are: curriculum; resources; subject choices; career education; school and classroom organisation; and teacher practices. These areas are interrelated and the role of the teacher is important in all six. (Research in all the areas can be reviewed in *Girls, School and Society*[5] and the more recent *Girls and Tomorrow*[6].)

Recent research on classroom interaction is of particular relevance to teachers. In the primary area[7], an Australian study shows that teachers demonstrate a preference for males, interacting more with boys and valuing male ideas more highly. Work undertaken in secondary schools[8] also shows that, in the classroom, both male and female teachers give more attention to boys than to girls and that teachers are quite unaware of this imbalance. Researcher Dale Spender found that two-thirds of classroom time was spent with the boys, and that when she herself attempted to equalise the interaction in a classroom she managed to spend only 42 per cent of her time with the girls. She comments that she had felt she was neglecting the boys, and that the boys themselves had felt they were being neglected. She therefore concludes that the male domination of classrooms is considered natural and feels fair.

Spender's research has been replicated in Australia[9] and the Australian research bears out the general findings. Clearly these sex differences in interaction patterns are pervasive and likely to be extremely important, and it is crucial that teachers understand how a myriad of social expectations affect what goes on in mixed classrooms in subtle ways.

Most States now have well-developed programs on the education of girls. The Curriculum Development Centre has also produced a number of useful resources. In addition, a good deal of expertise exists in particular areas (e.g. self-esteem, maths and science, technical areas and career choices) which relate to the education of girls.

The process emphasis and school-based focus of PEP seems most useful for examining issues relating to the education of girls in a school. Schools can then develop school action plans covering policy, strategies and target areas for change.

But the first step needs to be to increase awareness, at all levels of the system, that the education of girls *is* a serious professional issue. Many teachers are already aware of the problems and would like to address the issues dealt with in the PEP policy statement; but they are often hampered by lack of support at senior levels, sometimes within the schools themselves, and also by lack of help with resources. Only when teachers, educators and administrators feel the need to be informed of research and thinking in the area, and when they are convinced that there is indeed a problem, will the issues be no longer trivialised. Only when they are willing to examine critically their own assumptions and practices will we begin to make any headway towards achieving equity for girls.

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Girls and mathematics

Marjorie Carss

The educational preparation of women – especially as it either enables them to enter, or excludes them from entering, a variety of occupations and professions – has attracted increasing attention over the past decade. People are beginning to realise that society pays a high price when it restricts educational opportunities for any group of its citizens. The social and personal costs are especially high when that group comprises half the population.

One area of particular concern is that of mathematics, where the performance of girls has generally lagged behind that of boys and where their participation rate in senior classes and tertiary studies has been particularly low. This low participation rate has been recognised as a major factor in narrowing girls' future career opportunities.

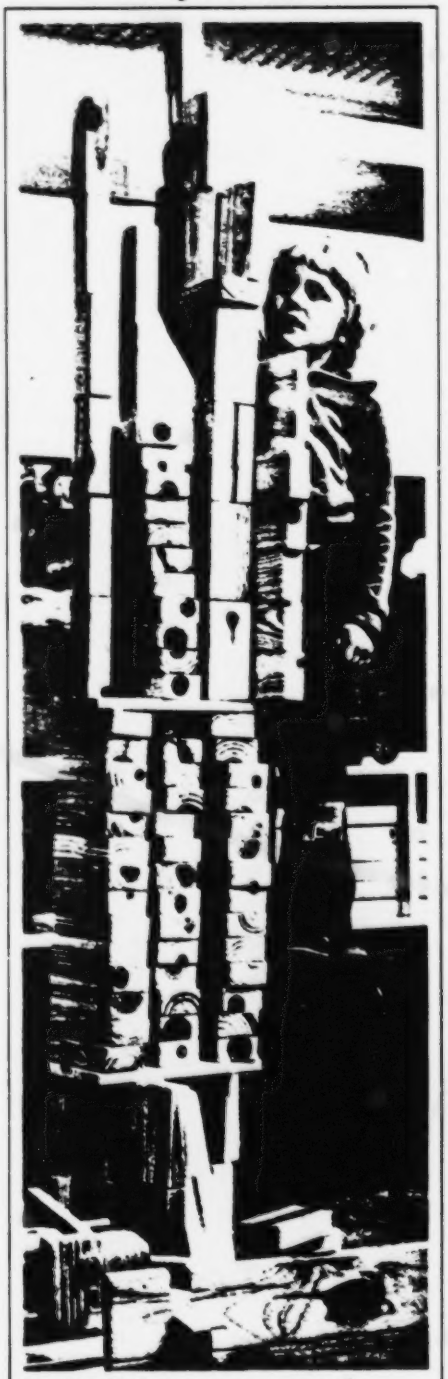
The importance of mathematics

Mathematics has been referred to as 'the critical filter'[1]. Measures of achievement in mathematics have served historically as a primary device for screening entrants to tertiary education, and mathematics has become a prerequisite for advanced study in an increasing number of career fields. Even occupations that do not require a high level of proficiency in mathematics often use mathematics performance as a criterion for entrance to the field.

Sex and mathematical ability

Until recently, differences in mathematics performance of boys and girls were widely accepted, by educators and the public alike, as a natural and unavoidable phenomenon. But research on sex-related differences in achievement in mathematics and a variety of intervention programs have now challenged the view that girls are necessarily less endowed with mathematical abilities than are boys.

A report[2] on sex differences in scores for the Second National Assessment of Educational Progress in the US indicated that where correction was made for participation rates in Year 12 classes, the differences were actually quite small. In Sheffield (UK), meanwhile, a study of attainment in mathematics of some 12- to 13-year-old-children[3] revealed that while the boys did better than the girls on every test, the differences were significant for only two of the tests. Overall the difference between boys and girls was not very great, and the variation between schools was greater than the boy-girl variation.



Handling blocks increases awareness of the relationships of size and shape.

One intervention program that has proved effective is *Multiplying Options and Subtracting Bias*[4], developed by the National Council of Teachers of Mathematics in the US. The activities in the program's separate workshops for students, teachers, counsellors and parents make the target audience aware of the problems of mathematics avoidance by girls, the stereotyping of mathematics as a male domain, females' feelings of lack of confidence towards mathematics, the usefulness of mathematics for all people, and differential treatment of females as learners of mathematics. Extensive evaluation of this project has indicated that it can substantially influence students' attitudes about mathematics and their willingness to take more courses.

Programs such as the Lawrence Hall of Science EQUALS project[5] have also shown that when girls are given opportunities to succeed in learning mathematics in an environment that values and supports their accomplishments, their level of performance improves dramatically.

Despite the growing evidence that girls can learn mathematics at the same level as boys, there has, however, been little real change in the participation of girls in mathematics (and science) classes once the subject becomes elective. In all Australian States the number of girls in the senior school taking mathematics courses that lead to further study in mathematics at tertiary level is approximately one-third the number of boys.

Reasons for disadvantage

Early experiences and expectations

Much of girls' disadvantage in mathematics begins in early childhood with the different experiences provided for girls and boys, and the different expectations parents and society have of their behaviour. Boys use and are expected to use more space in their games and general activities. They are given more toys that involve building, fitting, using motion and force. They are encouraged to explore and experiment with their environment, and generally behave in independent ways. Girls, on the other hand, are expected to be quiet, careful and nice, and are given toys with which they are expected to interact in socially acceptable ways and which do not provide opportunities for interaction in creative or exploratory activities.

The classroom experience

The low participation rate for girls in senior mathematics is a matter of real concern, but we need to look at earlier school experiences of boys and girls in mathematics classrooms if we hope to improve this rate. The problem of differential treatment of male and female students by teachers is probably a significant factor in the reasons why many able girls opt out of mathematics long before they reach the senior school.

Classroom studies show that we, as teachers, spend more time interacting with boys than with girls in our classes. Indeed, boys expect and demand more attention than girls[6]. In studies of mathematics classrooms where teachers made a deliberate attempt to give equal time to boys and girls, it was found that boys began to complain, and even protest that they were being treated unfairly, when teachers spent more than 40 per cent of their time with girls. There are many other subtle and unconscious ways in which the message is conveyed that mathematics is more important for boys than for girls.

Examples in textbooks also help perpetuate the view that mathematics is more relevant and important to boys than to girls. The majority of examples and problems involve contexts that are more likely to be familiar to boys, or related to traditional male occupations. Traditional role models are reinforced where males make decisions about spending large sums of money buying cars and houses and in investments, while females shop for groceries and clothing.

What can be done?

Perhaps our first task must be to alert students, teachers, parents, counsellors and administrators to the complex and deeply embedded societal beliefs about roles and expectations for males and females. It is also important that we change the educational environment for girls so that they recognise the importance of mathematics. As teachers we can

Playing with mechanical toys gives children a feel for the geometry involved in machines.

choose our texts carefully to avoid sex bias, and we can work consciously to ensure that girls receive their fair share of our time, attention and support. But much more than this will be necessary before the importance of mathematics to the future of girls is fully appreciated.

Both boys and girls must become more aware of changing life roles and expectations. Females are expected to work for at least part of their lives, and many find themselves as the major or only source of income for their families. Changing social attitudes and working conditions now make it possible for a female to have a career as well as fulfil the traditional role of motherhood.

Even with the increased access of females to a wider range of careers and job opportunities, however, many parents and counsellors still encourage girls to consider the traditional occupations, mostly clerical in nature, that are quickly disappearing from the job market. Too little information about alternative employment opportunities and the prerequisites for them is readily available at the time when critical decisions are made.

We must help girls to understand that most traditional jobs are no longer available to them, and encourage them to consider long-term life roles and career structures when choosing the subjects they will study in high school. Teachers and parents have to help girls develop confidence in doing mathematics and make them aware that if they do not do as much mathematics as they can at school their options will be fewer and they will be unable to make realistic choices about their careers. Girls need to be more aware of the importance of exercising their talents in mathematics, in widening their interests and in raising their consciousness about its importance in professional and work experiences. While schools remain basically sexist in nature, parents and teachers will need to give girls extra encouragement and support in pursuing the study of mathematics.

It is not enough, however, simply to direct our attention, programs and support to girls in our mathematics classrooms. We must also work with the boys; we must provide opportunities for them to work co-operatively with girls in mathematics classrooms, for they will be working with females in their future occupations and professions. This is especially important where girls elect areas that have been traditionally identified as male occupations, such as engineering or management. We must also alert the boys to the disadvantages suffered by girls in the past and help them to recognise and overcome their own prejudices.

It is only by supporting both girls and boys in the learning of mathematics, alerting students, teachers, parents and employers to those attitudes and practices that currently disadvantage girls, and providing support and guidelines for change that we can ensure equal access and opportunity for the full participation and contribution of girls to Australian society.

Social stereotyping of girls' roles minimises their opportunities for exploratory activities and hinders the development of spatial judgment.

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Girls, sport and physical education

Viki Rutter

SETTING:
A secondary school somewhere in Australia.

ITEM 1:
Daily Notices:
Girls from 9A, 9B and 9C will attend Parentcraft classes in Period 2 on Tuesday and Thursday for the next six weeks. Boys from those classes will attend lessons in maths, science and technical drawing as assigned.

ITEM 2:
Lunch-time practice of high jump, open to all students in preparation for the forthcoming athletics carnival:
Several girls withdraw from participation before attempting their first jumps, and the majority are unable to have a turn as boy after boy starts to run in, even while a girl is doing her approach. Many girls give up in frustration, while others gradually withdraw when their jumps are met with cries of 'flash'. Any intervention by a teacher draws more attention to the situation and causes more embarrassment and reluctance to participate.

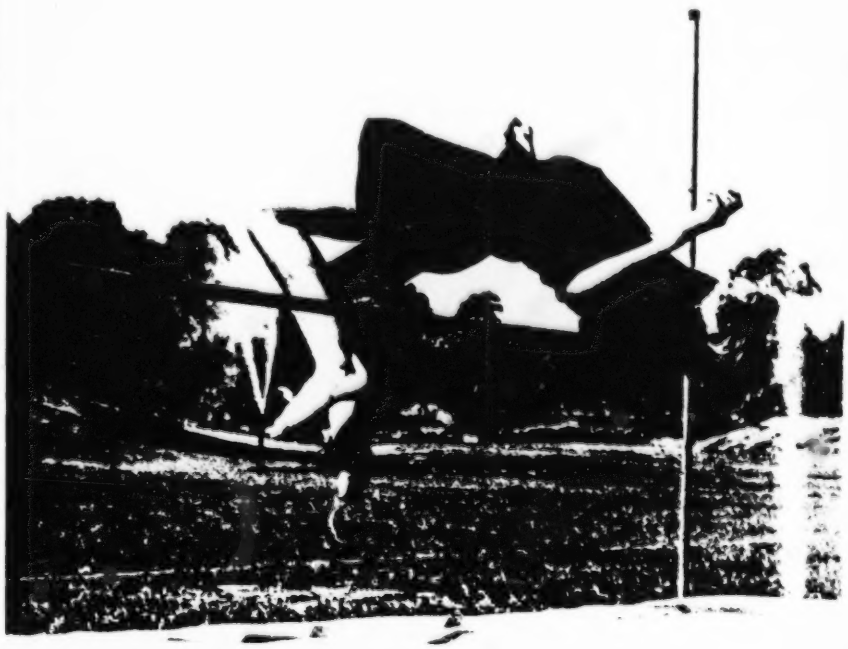
ITEM 3:
A computer class with a limited number of terminals for the mixed group of students:
Boys take the majority of them and the girls are required to share the remaining two or three, preferring not to 'stir' by asking for a greater share.

These and similar situations, which are accepted as the norm in many Australian schools, are evidence of the inequalities experienced by girls in their lives at school. But official recognition of the discrimination that exists is often lacking, in spite of the extensive research findings available. Students are then put at a further disadvantage in the national education race; for the girls suffer from having fewer 'life chances' than the boys, while the boys are left in ignorance of the important social and economic changes taking place in the position of women – changes that will affect their futures in a world of increasing equality of opportunity in all areas.

Girls and physical activity

Areas of education highlighted as reflecting sexism include science, maths, technical subjects, home economics, computer education and career education[1]. But the influence of sexism is perhaps felt most in physical education and sport, fields that have traditionally been regarded as male provinces. For girls to have any degree of success, or even enjoy simple participation, in these areas, they must first overcome several barriers – historical, physiological, psychological and social.

Historically, the Australian tradition has held it to be improper for women to be physically active in sport[2]. Physical labour has, however, been accepted and



A well-executed Fosbury Flop, the result of consistent practice using first-class equipment. Girls usually have less access than boys to school sports facilities.

Two Craigslea High School students demonstrate self defence skills in courses specifically designed to meet girls' needs.

expected in domestic duties. This attitude has been reinforced by the physiological barrier which is based on assumptions rather than facts about women's bodies; myths and fallacies about women's physical abilities (or supposed lack of them) have been passed down through generations. Many people still believe them today, including some administrators of school sports who control availability, facilities and choices. As a result, girls are less fairly catered for than boys. Only when these misconceptions are dispelled will girls be given equal opportunities in physical activity.

Psychologically, success in sport demands aggression, competition, drive, individuality and endurance, all considered in western society to be male characteristics[3]. They certainly have no part in the general concept of femininity. Society expects females to be nurturant, submissive, inconsistent and intuitive; but these attributes are unlikely to lead to success in life, let alone in sport. Nevertheless, many girls are stereotyped into these roles, and to show the male traits conducive to competitive success often results in ridicule or pressure to conform.

Social barriers to girls' participation in physical activity are present from their earliest years. As they grow older, the most limiting factor is peer pressure, which is felt most strongly at school. It urges young teenage girls to be at their most feminine, and sport is not considered conducive to femininity. Girls are lucky if they are able to overcome this early conditioning sufficiently to enjoy physical activity later in life.

The media reinforces this socialisation; there is little media coverage of girls playing sport and often those who do are treated as freaks or sex objects. Those who happen to excel are treated as wonders and, in a way, they are – they have become successful in spite of the system.

What schools can do

In schools some changes to existing procedures could help alleviate the situation.

Physical activities

There is a need for physical education specialists to be appointed full-time at primary-school level, giving specialist attention to basic skills such as

throwing, catching, kicking and running. At this level, teaching methods and teachers' expectations should be the same for girls and boys; for, with positive guidance, each can learn to kick, bowl, bat and skip as well as the other, just as they already learn to swim with the same application and involvement.

Programs at both primary and secondary levels need to be re-evaluated and a more even distribution needs to be made between choices for girls and for boys. Schools should provide activities that can accommodate the widest range of students: all boys do not want to play rugby and wanting an alternative does not make them in any way inferior to boys who do. Girls activities need not be replicas of the boys programs. Netball, softball, girls cricket or touch football have a legitimate place, but programs should also be offered in girls-only activities such as self-defence and fitness for women.

An area that requires particular attention is the transition from primary to secondary school. Fun and fitness are part of schooling at primary level, and efforts are necessary to see that they remain a part of schooling throughout puberty and high school, where so many girls drop out due to age, low self-esteem, peer pressure and poor programs.

Improving self-esteem

Girls' low self-esteem can be improved by providing more positive role models in schools, particularly at primary level. As many women teachers as possible need to become involved in physical activities, encouraging participation and praising success. They would be helped in this role by greater availability of information and in-service courses and by the introduction of more PE programs of fun activities, such as the Department's 15/30 program.

Habits and attitudes are reinforced at secondary school, and PE specialists need to be aware that their own confidence and competitiveness tend to make them concentrate on the skilled

Craigslea athletes respond with maximum effort and positive attitudes to concentrated coaching and the support of interested adults.

and to have low tolerance for the students who do not try. But the non-tryers are often low in skill, lacking in confidence, sensitive to taunts and, in the majority of cases, female. The specialists must realise that girls' reluctance to participate is the result of expectations and socialisation and does not mean that they are 'lazy', 'pathetic' and 'weak' – descriptions that are often heard in schools from adults and students alike.

At both levels, schools can give girls greater confidence in their sporting ability by regularly inviting sportswomen to speak to students, and by encouraging lunchtime sports for girls, so that they know they are entitled to use equipment and space.

But new programs alone will not bring about the necessary improvement without a change in attitudes. While girls continue to believe they are physically less able, and while insensitive male students and unaware teachers with lower expectations of girls reinforce this feeling, the situation will not change.

Girls' belief in their own physical ability can be changed by specialised physical education programs, including remedial work to help them 'catch up'. (It is preferable for the remedial work to take place in segregated classes so that peer pressure will not be as great.) To change teachers' attitudes, professional development seminars, in-service and awareness arousal, and much time and effort will be required.

Respecting individuality

The aim of those working for equality in education is not to discriminate, but to make education of equal importance to both sexes. While the language, curriculum, resources, classroom dynamics and subject choices continue to stress the predominance of male experiences, however, education will continue to favour males. And while traditional expectations are placed on students, discrimination will persist: girls subject choices will be limited because it is assumed they will enter traditionally female occupations, and boys will be expected to be aggressive and competitive, with little interest in the humanities. But every individual is different and needs to develop in his or her area of choice without being pressured by parents, by teachers or by society in general.

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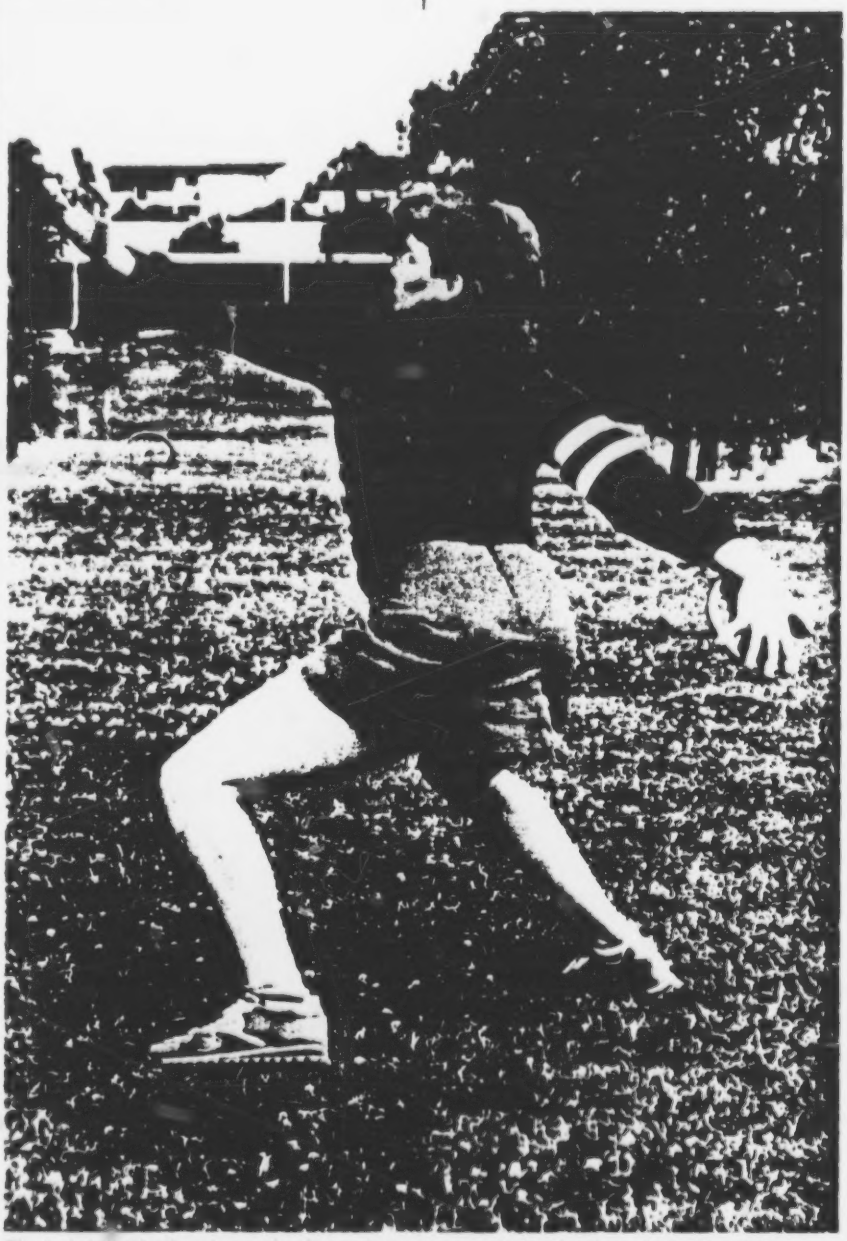

Physical skills like throwing need to be taught in primary school to heighten girls' self-confidence and avoid possible low self-esteem in adolescent years.

'Against the laws of nature'

Reet Howell

Australian female athletes have won world-wide recognition for their outstanding performances in the Olympic Games, the pinnacle of most amateur athletic competitions. An Olympic Gold is considered the highest honour that an athlete can obtain.

A total of 17 Australian women have achieved this distinguished honour. Some, such as Marjorie Jackson, Shirley Strickland, Betty Cuthbert, Dawn Fraser, Lorraine Crapp and Shane Gould, have stepped on to the victory dais more than once and have, through their feats, brought glory and recognition to Australia. But the participation of females in the Olympics has not always been welcomed, either in Australia or abroad.

In the latter half of the nineteenth century the seeds for a revival of the ancient Olympics were sown in Europe. Baron Pierre de Coubertin, a French aristocrat, enamoured of the English ideals of games and sportsmanship, dreamed of a multi-sports festival where the youth of the world could come together in friendly competition. His dream became a reality in 1896 when the first modern Olympics were held in Athens, Greece.

Women were not invited to compete in the 1896 Games because de Coubertin, as the founder of the Olympic movement, could not conceive of females being involved in vigorous athletic competition; he even claimed that women's sports were against the laws of nature. He was an idealist and a product of his times, steeped in Victorian values and norms. Coubertin did, however, believe that women should be at the Games to applaud and crown the winners.

Baron de Coubertin was President of the International Olympic Committee (IOC) from 1896 to 1925. Nevertheless, in spite of his attitudes and beliefs, women were officially allowed to compete in the Olympics from 1900, when the second modern Olympic Games were held in Paris. A total of 11 women competed in tennis and golf, two sports that were considered socially acceptable for ladies. In 1904 archery was added, but was discontinued after 1908 and not held again until 1972. Figure skating for women was introduced in 1908, and in 1912 swimming.

The biggest battle was to have women's athletics included; and only in 1928, after the women had successfully staged their own international athletics competition, was the sport admitted to the Olympics. There is still, however, a considerable discrepancy in the number of men's and women's events; in 1980 only 16 events were held for women, while 23 were held for men. Men have competed in the marathon since 1896, but the women's marathon was held for the first time this year.

Australian attitudes to women in sport in the early days of the modern Olympics differed little from those of Baron de Coubertin. Victorian ideals had been transported to Australia from the mother country, and women were regarded as soft, delicate creatures to be placed on a pedestal and admired in spite of the toughness and courage they needed to survive, particularly in the outback. Sport on the other hand was equated with manliness and women did not fit into this conception.

It was only after considerable controversy, then, that two Australian women—Fanny Durack and Mina Wylie—were chosen in the 1912 Stockholm Olympics. Durack, then 20 years old, became the first woman to receive a swimming Gold when she won the 100-metres freestyle, the only swimming event for women at the Games (there were six events for men). Her times were comparable with the men's. She covered the distance in 1 minute 22.2 seconds, the identical time swum by A. Hajo of Hungary in 1896 when he became the first male 100-metres Olympics champion. In the heats she had broken the then world record with a time of 1 minute 19.8 seconds.

In spite of the initial reluctance to send Australian women to the Olympics, they have performed well for Australia and their record compares favourably with that of Australian men. Marjorie Jackson, for example, was not only the first Australian woman to win a gold medal in athletics; she was also the first Australian, male or female, to win the coveted sprint double, equalling the 100-metres world record and setting a new world record in the 200 metres. In the following Olympics, in 1956, Betty Cuthbert repeated Jackson's achievements and set new Olympic records in both distances. She was later to win even more acclaim by winning the first 400-metres race for women at the Olympics. Another Australian, Dawn Fraser, is considered by many the greatest swimmer of all time. She is still the only athlete to have won the same event—the 100-metres freestyle—in three successive Olympics. Shane Gould also holds a first—she was the first Australian in any sport to win three Olympic gold medals in individual events in the same games. Australia's women's swimming team at those games, in 1972, won a total of five golds to the men's one.

It is in swimming and athletics that Australian women have shone, having won 21 gold medals to the men's 17 since 1948. In athletics alone, the figures favour the women even more; they have won nine gold medals, while the men have won only three.

(This article is adapted from a longer article by Dr Howell, 'Australia's Golden Girls at the Olympics'.)

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Girls' needs at Babinda

Mary Clarke

Babinda State School in North Queensland is a target school for the Participation and Equity Program. As part of this program, school staff had first to develop a school profile which would outline both the positive and negative aspects of the school. The *Sex Discrimination Bill* was receiving extensive press coverage at the time, so it was suggested that, in developing the school profile, a survey should also be undertaken of opportunities for girls. The survey involved looking at the school organisation (for example, subject choices and sport), asking female students their opinions, asking staff to comment, and analysing the aptitude, achievement levels and destinations of the students. The results provide an interesting insight into the position of girls in a small country town.

The curriculum

At first glance, it would appear that the organisation of Babinda State School's Secondary Department gives girls and boys equal opportunities to participate in a full range of activities. In Year 8, for example, it is compulsory for all students to do the same set of subjects - English, maths, science, multiculturalism, history, geography, manual arts, home economics, health and physical education, art, music, sport and religious education. So boys and girls at least start off equal.

In Years 9 and 10, all students study English, maths, science, history, geography and commercial, and students also choose one subject on each of the following lines: Shop

Some of the girls at Babinda choose to do woodwork instead of home economics.

A/home economics; Shop B/Italian; and graphics/ art/skills for living. It is in making these choices that the first problems occur. Since manual arts and home economics are on the same line, students are unable to do both. They certainly do have a choice, but many outside factors come into play in making a decision when one traditionally male subject is offered against a traditionally female one. Students are influenced, for example, by the desire to be with their mates and by the peer group pressure to conform to society's norms.

Babinda's survey found that peer group pressures were more likely to discourage a boy from doing home economics than a girl from doing manual arts. Class-mates' accusations that a girl wants to do manual arts just to be in a class with boys can often, however, make it difficult for her to choose manual arts, no matter how genuine her interest in the subject might be. Nevertheless, a few girls have continued with manual arts and graphics into Years 9 and 10.

A few girls play touch football with the boys.

Sports

On the sporting field, some mixed sports, such as canoeing, tennis and volleyball, are offered. Girls also play touch football, soccer and hockey in all-girl groups in addition to the accepted female sports - netball, softball and vigoro. But the girls feel that, indirectly, they are discouraged from playing the 'boys' sports. Each term, lists of sports for boys and for girls are drawn up and only the most confident girls are assertive enough to challenge the lists and put down a boys sport, such as soccer, as their first choice. Girls also feel that they have fewer opportunities for sport at a competitive level either in the school or in the community.

At lunchtime, girls occasionally try to join teams of boys playing cricket or touch football. Often, though, the boys ignore their presence, and the less assertive girls soon give up.

Resources

Teachers consistently referred to a lack of non-sexist resources in specific subject areas. This was particularly noticed in art and science (were all great artists and scientists male?), home economics and mathematics. In home economics, teachers found that all designs were for dresses and that there were no projects of a general nature, such as making a bag, that students of both sexes could enjoy. The problem in mathematics was that males in textbooks tended to spend large amounts of money buying houses and cars while women spent small amounts on clothing and groceries.

Attitudes to students

Teachers felt that there was no difference in the ways they treated male and female students, but some students disagreed. These students thought that male teachers pitied the girls and did not expect as much from them, or that female teachers had male student 'pets'.

Student achievement

Analysis of aptitude, achievement and destinations of students yielded some interesting and unexpected results. A simply survey of the 154 Babinda students - 87 girls and 67 boys - who had completed Year 10 in 1981, 1982 and 1983 found that 70 per cent had continued their education in some form while the other 30 per cent had joined the work-force. An interesting situation was revealed when the figures for girls and boys were considered separately (see Table 1).

Contrary to normal expectations, the figures show that more girls than boys proceeded with their education.

The 1981 Year 10 group, 54

Table 1

	Continued Education %	Joined Work-force %	Unemployed %	Total
GIRLS	81	13	6	100
BOYS	55	34	11	100

Table 2

	Year 10 %	Year 11 %	Year 12 %	Tertiary %
GIRLS	100	62	44	18
BOYS	100	32	0	0

students in all, presents an even more interesting picture (see Table 2); for no boy from this group has completed Year 12 either at Babinda or at any other school. On the other hand, almost one-half of the girls completed Year 12, and almost one-fifth proceeded to tertiary education.

Some questions were raised as a consequence of these results: Was it just a bad year for boys (i.e. a lower aptitude group)? Were the girls achieving better than the boys? Did the boys leave because jobs were more readily available for them?

A simple statistical test on aptitude scores for the group found no significant differences between boys and girls of that year. As a guide to achievement, the students' maths scores at the end of Year 10 were considered and they showed that the girls had, in fact, achieved a higher standard than the boys. The reasons for this higher achievement, and for their greater retention rate, are not clear, but some ideas put forth in a discussion during a community dinner are worth considering:

> It could be that in a sugar mill town like Babinda a lot of families expect their sons to work on the farm or as an apprentice at the mill; therefore there is no reason for the boys to be ambitious.
>
> The lack of jobs for girls in the town means that they have to obtain good results in order to compete for jobs in nearby centres.
>
> Some ethnic groups in the community prefer that their daughters remain at school rather than leave home at an early age to work in a larger town.

Babinda is a small school in a small country town and many of the findings of the survey can be related to this fact. Regardless of their scholastic ability, boys are less likely to continue with their education as there are jobs for them in the local community. Girls often have no alternative but to remain at school. It is likely that similar results would be obtained for other towns whose main support is a sugar mill and farm community.

Some general conclusions

The school has moved in the direction of offering equal opportunities in its courses, but traditional values in a small rural community, peer pressure and concern for future employment prospects prevent all but a handful of girls from choosing traditionally male courses. One pleasing trend is, however, that girls feel able to participate in traditional male sports and it is hoped that this will be encouraged rather than discouraged by the school staff.

Babinda is too small a school to have a senior mistress, a person who, in larger schools, would presumably support equality for girls. Girls at Babinda are therefore often obliged to enlist the junior female staff for support and counselling.

Teachers with experience in large city schools often comment on what they perceive as the low self-esteem of Babinda's students. The school guidance officer has suggested that this could be due to the small student population and the resulting difficulty in forming peer groups. On any single issue a student may, for example, be completely alone in holding a particular opinion. Talented students, particularly, may find themselves regularly isolated because they are different and their self-esteem suffers. The overall result tends to be that one or two students are outstanding, while the rest become aggressive rather than assertive and often destructively critical of fellow students.

The Participation and Equity Program has provided a useful opportunity for the school to evaluate and modify its profile, and the school is now assessing what it can do to correct the inadequacies revealed by its survey.

Mary Clarke is a teacher at Babinda State School Secondary Department.

New skills learnt in Shop A widen career options for girls.

Schools, girls and special needs

Bernadette Roberts, Jan Hannant,
Sharon Borrows, Delle Robertson

In co-operation with Commonwealth Government authorities, the Queensland Department of Education is implementing the Participation and Equity Program (PEP), which provides support to both the schools and the technical and further education sectors of education. It has two aims:

- To encourage all young people to participate in education or training at schools or technical and further education institutions, or in other forms of education or training, until they have completed a full secondary education or its equivalent.
- To ensure that, as far as practicable, the education and training provided in schools and technical and further education institutions offer all young people equal opportunities to develop their individual talents and abilities, and thereby to ensure more equitable outcomes of education.

In 1980, the Myers Report[1] drew attention to the fact that two-thirds of the women in paid employment in Australia were concentrated in the sales, service and clerical fields and that women were represented in only 18 of the 61 occupations listed by the Australian Bureau of Statistics. Later Queensland figures showed a similar pattern in the Queensland labour force. Myers went on to note the part social conditioning plays in reducing what females see as their career options and therefore in narrowing the range of subjects girls choose to study at secondary school.

Women and girls form one of several groups whose disadvantage is addressed in the Participation and Equity Program (PEP). PEP's educational objectives[2] relating to girls draw attention to a number of factors: the gender-based divisions in society which contribute to *differential schooling, occupational and employment opportunities* for young people of both sexes; the *differential valuing of education* for girls and boys; the *unexamined and irrational assumptions* which underlie approaches to schooling that promote women's economic dependence and its social and political consequences; the *undervaluing and invisibility in education of the experiences and achievements* of women and girls; and the *cultural clash* between home and school which leads to some girls being withdrawn from schooling.

The Commonwealth Government has stressed that[3]:

> Schools have a particular role to play in combating discrimination on the grounds of sex. Schools can do much to assist girls to gain the confidence and competence necessary for equal participation in today's society.

But PEP's activities will not be restricted only to schools. Changes are also needed in TAFE colleges where the job clustering noted by Myers is reflected in enrolments by women in vocational courses. Under PEP, in fact, the opportunity exists for fundamental changes in State Education Department offerings for 15- to 24-year-olds. Schools could, for example, elect to establish the supportive environment necessary for a return to secondary education by females within this age range who had not completed a full secondary education in the first instance.

Females in secondary schools

In efforts to correct the imbalance evident in the work-force participation patterns of males and females, the position of the secondary school is critical. Specific programs are needed which provide for girls:

- experiences which broaden their perceived career options; and
- skills instruction in areas where girls' skills are lacking (e.g. estimation and spatial visualisation).

Care and caution are necessary, however, in developing and implementing initiatives to meet girls' needs. It is important that efforts are undertaken in ways that do not interpret girls' special needs as evidence of inferiority and dependence, or of any other stereotyped behaviour. Girls' conditioning and often low self-esteem also make it advisable that exploring and learning 'catch-up' skills take place in a single-sex non-competitive environment.

PEP action areas

Considerations pertinent to meeting the needs of girls are relevant in all eight PEP action areas proposed by the Schools Commission – curriculum; assessment, accreditation and credentialling; teacher-student-parent interaction; teacher renewal and support; school structure and organisation; post-school links; groups with special needs; and public support for education (see Table 1). It is anticipated that school initiatives in all these areas will further the implementation of the Departmental Policy on Equality of Opportunity in Education for Girls and Boys.

Assessing school needs

In assessing their needs, schools will need to give special consideration to the composition and nature of the school population (including the proportion of girls leaving schools at Year 10) and the job aspirations and post-school destinations of current and past female students. Aspects of the school environment will also have a bearing on their plans. Action would obviously be much easier if there were a PEP or equality of opportunity committee in the school to take on the support and

Kath Hastings and Rose Harty discuss a PEP brochure at the Gold Coast seminar for senior mistresses.

Table 1:
Meeting Girls Needs—A Checklist

PEP Action Areas	Pertinent Questions
Curriculum	Does the content of programs value the contribution of girls and women equally with that of men?
	Is the content based on stereotyped notions of different female and male abilities or roles?
	Is the content taught with different aims in mind for girls and boys or are the same goals applied?
	Will special initiatives be required to build up girls' skills and confidence in the area? If so, what arrangements can be made to accommodate a non-competitive, supportive and/or single sex learning environment?
	Is the curriculum based on a sound assessment of girls' present and future needs and life options?
Assessment, Accreditation and Credentialling	Do the proposed assessment measures of student achievement involve sex stereotypes?
	Are the proposed assessment measures sex biased or based on calculation procedures which involve sex bias?
	Are students, parents and employers confident that the proposed assessment procedures are not sex-discriminatory?
	Are the proposed assessment and credentialling procedures adequate to provide equal access for either sex to post-school training and education?
	Have plans been implemented to develop a school database to document and evaluate current practices in meeting girls' needs and analysing community resources available?
Teacher/Student Parent Interaction	Are the teachers and parents of students involved aware of the particular needs of girls?
	Has opportunity been provided for students, teachers and parents to discuss employment and unemployment trends, life patterns of women in Australia, and general social, economic and technological changes as they affect families and adult roles and responsibilities?
	Have initiatives been undertaken to reduce teacher and student sex-role stereotyping in subject areas and to demonstrate the delimiting effects and inappropriateness of sex-role stereotyping?
Teacher Renewal and Support	Are teachers informed on an accurate factual basis in education literature of the particular needs of girls and of the delimiting effects of sex-differentiated teacher practices on students?
	Are sufficient resources and renewal and support provisions available to enable teachers to implement the necessary initiatives?
	Have teachers been supported in communicating to parents and employers the influences of technology on employment and life-pattern factors which influence work-force participation?
	Have teachers and parents been encouraged to understand the need for change and to accept changed attitudes and practices?
School Structure and Organisation	Have provisions for flexibility in teaching, time scheduling and curriculum adaptation and diversification been considered and tried in efforts to promote increased equity and participation for girls?
	Have single-sex groupings of students been considered in skills development programs for girls especially in male-dominated curriculum areas such as maths, science or manual arts?
	Have organisational arrangements and procedures, including staffing provisions, been reviewed to ensure that organisational and structural features of schooling do not preclude equality of opportunity for boys and girls?
Post-School Links	Have relationships and consultative processes between the school and tertiary institutions been fostered to encourage a diversity of learning opportunities for the full range of students and to improve access to further and higher education?
	Do the available post-school learning programs cater broadly for girls' present and future needs beyond traditional sex-stereotyped role and job expectations?
Groups with Specific Needs	Have initiatives considered the special needs of groups of girls, such as Aborigines, girls from non-English-speaking migrant backgrounds and girls from low socio-economic backgrounds?
	Are the necessary resources, staff and organisational arrangements available to meet the needs of these specific groups?
	Are teachers informed about the needs of specific groups of girls and encouraged to implement initiatives to meet these needs?
Public Support for Education	Has the school taken an active role in promoting awareness of, and support for, initiatives to meet the particular needs of girls?
	Has information about successful special initiatives for girls been disseminated to other schools, parents, employers and the local community?
	Have supportive structures and networks been established that facilitate rather than limit school activities and enhance the credibility and acknowledgment of school initiatives?

direction of initiatives for girls.

The nature of the community is equally important, particularly the level of teenage female unemployment and the local and regional job market situation. Community support will be necessary in broadening girls' personal and occupational horizons, so liaison with various groups will be a vital part of most PEP programs. Important groups will be parents, employers, unions and other schools, as well as local and other agencies working on social, educational, community and employment issues with particular concern for women and girls.

School initiatives

Four areas requiring initiatives in schools have already emerged - career awareness; self-confidence and self-esteem; maths, science and technology; and sex-role stereotyping.

There is need for career awareness that extends the job aspirations of girls and promotes their understanding of the full range of existing jobs. Programs should also make girls aware of how technology is affecting employment patterns and extend their knowledge and experience of technical trades and allied areas of training and employment.

Career education is one area where action can also be taken about sex-role stereotyping. It can help reduce the perception of jobs as being male or female and demonstrate the delimiting effects and inaccuracies of sex-role stereotyping. Through career education, schools can also encourage girls to study subjects such as maths and science at higher levels and help them to understand the importance of these subjects for active and worthwhile participation in a changing technological society.

Girls' self-esteem can be improved through programs that encourage them to see themselves as equal to boys and help them to develop critical thinking skills. Specially tailored courses can also help girls develop the leadership and assertiveness skills they often lack as a result of sex-role stereotyping.

A wide range of activities could be considered by schools. They might include liaison exercises to raise community awareness, special school course components on women's changing role in the work place, or workshops to introduce girls to occupations they had not previously considered. The development of directories of women in non-traditional areas or visiting them in their work places could provide role models for girls, while innovative teaching strategies and courses could be aimed at making maths, science and technical subjects more appealing.

Females in TAFE

Queensland TAFE provides open access to all its courses, though some have employment and minimal school achievement requirements. Nevertheless, in 1982, only 33.6 per cent of people enrolled in vocational courses were female. This, combined with the clustering of enrolments in a narrow band of courses, makes it important to try, not only to expand women's participation in TAFE, but also to assist them to take up the broad range of educational opportunities offered.

At a Senior Mistresses PEP Awareness Seminar held at the Gold Coast, Acting Inspector (Schools) Les O'Gorman (second left) talks with June Macqueen, organiser of the Seminar, Secondary Division PEP Consultant David Scott, Brisbane-South PEP Co-ordinator Kath Hastings, and Rose Harty, Senior Mistress of Longreach High School. Other seminars were held at Hervey Bay, Magnetic Island and Caloundra.

Queensland TAFE, as part of PEP in 1985, is committed to assisting women to undertake TAFE courses, especially those that will enable them to pursue non-traditional vocations. Two types of activity will be involved: TAFE will mount a number of PEP-funded access and bridging courses for women; and various PEP-funded support activities will encourage women to complete TAFE courses successfully.

Access courses for women

The aim of the access courses is to help female students continue on to mainstream TAFE courses and obtain vocational qualifications. To assist women in later pursuing non-traditional educational and vocational opportunities, the courses will incorporate aspects of career education about non-traditional vocations. Students will visit local industries and engage in work experience projects; they will also have 'hands-on' practical experience at their TAFE colleges in addition to classroom presentations and discussions. Courses will also include vocationally related theory education in school subjects (e.g. maths and science) and a personal development program.

An existing access course, at present available to both men and women, is TAFE Raises Youth Skills (TRYS), a full-time, five weeks' course. It gives students the opportunity to sample TAFE studies in a number of vocational areas as an encouragement to undertaking more extensive studies towards a particular vocation. In 1985 at least one TRYS course specifically for women will be offered.

Another course, the full-time 12 weeks' Access to Non-Traditional Pre-Vocational Courses for Women, prepares female students for courses in non-traditional areas, in particular for the three existing pre-vocational courses—Engineering/Construction, Urban Horticulture, and Graphic Arts. Students study the mathematics and science concepts required for these trade areas. The life skills component looks at the issues involved in being women in a predominantly male occupation and includes practice in assertion skills and self-esteem building techniques. As much as possible, the topics are integrated and applied to each trade area.

TAFE Curriculum Branch is also developing a general TAFE access course for students who are unable to enter mainstream TAFE courses because of past low academic achievement. This course aims to enhance students' chances of participation in further education, especially in TAFE, and will most likely be offered several times in 1985 as an access course for women.

TAFE and school co-operation

In one Queensland town (Nambour) the TAFE college and Burnside High School are already co-operating to offer courses which allow the secondary school students to undertake some or all of their studies in the TAFE college (see Focus, p. 28 in this issue). Through PEP this program will be extended. It is hoped that such programs will give many female students educational experiences in non-traditional areas. Involvement in TAFE programs should alert them to a broad range of vocations and encourage them to undertake further educational programs.

PEP support activities for women

PEP is at present considering possible support activities for 1985. One suggestion is for promotional activities to attract women to TAFE courses, especially in non-traditional areas. Other suggestions are for the development of resource materials focusing on issues of concern to women entering non-traditional areas and for staff development to encourage staff support for these women.

Evidence from other States suggests that women counsellors or co-ordinators are necessary to ensure that female students persist with their studies in non-traditional areas, and PEP will look at the possibility of providing this support to female TAFE students.

Helping PEP succeed

To ensure that PEP has the maximum effect possible, in each State a Ministerial Advisory Committee has been established to advise on ways of combating disadvantage to the designated groups. In Queensland, the Committee includes a Chairperson (from the Education Department) and representatives of secondary education and TAFE and the two major teachers unions. The Departments of Education and Youth Affairs and of Employment and Industrial Relations, the Commonwealth Schools Commission, the Tertiary Education Council, and the Industry and Commerce Training Commission are also represented, as are parents, students and youth groups.

Testimony to the importance given to the issue of female disadvantage is that the Commonwealth Government also requires that each State committee contain a ministerial representative with experience in the equal opportunities field. The interests of girls and women will therefore be well looked after, and rapid progress should result from school initiatives.

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The authors wish to acknowledge the work of Departmental colleagues, in particular Fergus Smith and Eileen Duhs.

Self-concept and role models

Claire Stapleton

The lower expectations of girls, the stereotyping of both boys and girls, and the reality of unequal educational outcomes are of concern to all teachers. At the official level, both the Queensland Education Department's policy of equality of opportunity for girls and boys and the Participation and Equity Program imply that broad changes are necessary. The curriculum, classroom practice and school organisation all contribute to the inequality, not least in the effect they have on children's own self-concepts and consequently on their academic achievement and future careers.

Self-concept and learning process

Self-concept is[1]:

> the consolidation of all the information received from a person's environment . . . Consequently, environmental and social experiences play a significant role in the building and moulding of a child's self-concept.
>
> For example, a child interprets positive reactions to his or her person as 'I am good' and negative reactions as 'I am not good'. Subsequently, he or she integrates the accompanying feelings of worth or worthlessness into his or her self-image. Therefore when a child says 'Thats me!' he or she is referring to the many attitudes, beliefs, values, ideas and perceptions that make up his or her total self-concept.

A positive self-concept is central to the learning process.

The importance of self-concept in the learning process cannot be overestimated; for children's perceptions of their own abilities have been found to have a greater influence on their academic achievement than have their measured abilities[2]. How girls are taught to see themselves, their roles and their abilities can therefore be crucial to their success, both in school and in their futures.

Children have a sense of belonging to one sex or the other from an early age, with the family, school and peer group being the primary contexts in which gender identity is established. The most critical years are from 4 to 8; so, by the time girls come to school, they have already accepted sex-role stereotyping to some degree, and the school has traditionally reinforced the stereotype. The result is that girls' development is often limited by expectations of what is appropriate or possible for their sex.

Teachers and self-concept

Teachers often convey their expectations unconsciously. One 9-year-old girl remarked, for example, 'I think boys are stronger than girls because the teacher always gets the boys to carry the heavy things like the film projector'. (Boys, of course, may also be disadvantaged, for example by being taught that to express their feelings is inappropriate for boys. 'Only sissies cry' is an attitude that shortchanges boys in the area of emotional development as well as devaluing girls.)

Teachers' attitudes, expectations and beliefs form part of the 'hidden curriculum' of schools, an informal process which[3]:

> encompasses the lessons to be learned from observing and experiencing who wields power, whose needs are given priority, who and what is rewarded; teachers' attitudes and behaviours, the value system on which the school is predicted and the whole ethos of the system.

The educational implications are clear Changes in curriculum content alone will not be sufficient to bring about

equality for girls. Without attention to the 'hidden curriculum', little progress can be expected.

Individually, teachers can do much to promote in children healthy self-concepts not limited by sex stereotyping. Teachers can examine their teaching styles and behaviour for sexist practices. They can see that they do not have different expectations for the behaviour of girls and boys, such as accepting the rowdiness of boys but not of girls; for it is through such expectations that girls learn the feminine traits of deference and submission. They can also ensure that girls and boys are treated equally in their classroom management; for instance, in lining up, in answering questions, and in the duties they are given. They must realise that to differentiate in the learning situation on the basis of sex alone is not conducive to the development of individual potential.

The nature of the system

The education system has the capacity to contribute to raising girls' self-esteem through the way it represents sex roles. This representation operates on a different level from the individual interactions of teachers and students and yet has considerable influence on the way girls learn their roles.

We teach what we are, not just what we say... we teach our own self-concepts far more often and usually more effectively than we teach our subject matter[4].

An education system reflects the values and attitudes of the society in which it exists, and men and women teachers have themselves been shaped by these societal forces. Schools, too, reflect society's characteristics; they are generally male-dominated institutions where men are seen as figures of authority. Women are usually clustered in the lower ranks of education, dominating only in those areas traditionally seen as women's work, such as infant teaching.

Teachers distribution in subject areas also reflects society's orientation. Men are more likely to be found in the 'masculine' areas of maths and science, where the lack of positive role models for girls is one of many factors affecting achievement and retention rates.

Teachers have a professional responsibility to examine their self-concepts as woman or man.

Manual arts teaching is exclusively a male preserve, while home economics is staffed completely by females. This sexual division of labour can only reinforce the stereotyped view of male and female roles in society.

Schools should assist all students to develop a sense of self-worth[5].

Bringing about change

Based on an examination of the way sex stereotyping operates in the organisation and practice of the whole school, positive steps are necessary to open up the life choices available to girls. The curriculum, the resources of the school (selection and use), subject choice and career counselling, and discrimination in school and class organisation and in teacher practices must all come under scrutiny.

But significant change can take place only when all teachers recognise the part they have to play in shaping the way in which girls and boys see themselves and each other. They must realise that, as significant adults in children's lives, they have a crucial role to play in the development of the self-concepts of both girls and boys; that teacher-pupil interactions, irrespective of their overt content or subject matter, or whether they take place in or out of the classroom, have the potential to change or reinforce children's attitudes about themselves; and that teachers themselves must be catalysts for change if educational equality for girls is to be achieved.

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A Useful Resource

The Kids Show, a kit produced by Production and Publishing Services Branch of the Queensland Education Department, is one of a series of programs which are intended to supplement teacher use of the Queensland Health Education Curriculum Guide. Although the main audience will be pupils at middle-primary level, it should also prove useful for children at other levels. It is designed to enhance each child's self-concept and children are encouraged to share their ideas and recognise their own importance.

The kit comprises a videotape, teachers notes and pupils worksheets. The videotape presents a magazine-format program in a light, humorous way. It features a non-race- and non-sex-specific cartoon character, Everychild, who interacts in school, domestic and social situations. It also includes voice-over statements from a girl and a boy; these statements are included in the notes and may be used to stimulate class discussion.

The teachers notes contain advice to teachers on promoting an environment in which self-concept can develop in a positive fashion as well as a bibliography of useful materials related to self-concept.

Production Services, *The Kids Show*, video + teachers booklet, Department of Education, Brisbane, 1984.

Curriculum and the small rural school

Matthew Glen

The small rural primary school has been a significant feature of Australian education since the earliest days of the nation's compulsory schooling legislation. Almost fifty years ago, these small schools in rural areas were to most Australians a symbol of national pride because they were providing equality of educational opportunity[1]. Even today the 'old bush schools' evoke nostalgia in people of past generations who received some or all of their schooling in them.

Yet, despite this extensive historical tradition, the small rural primary school has been in a state of decline due to a variety of educational, economic and social factors. It is ironic that these forerunners of Australia's modern system of free, secular and compulsory education have been ignored in the rapid pace of urban society. Researchers too have neglected small schools and, when they have been mentioned in the literature, it has often been for the purpose of listing their perceived deficiencies and weaknesses. Perhaps to some observers these very small institutions do seem anachronistic in a complex world where technology, progress and urbanisation are dominant.

There are some signs, however, of a growing revival of interest in, and concern for, the issues involved in providing quality education in country areas. These signs are coming from such diverse sources as 'grassroots' rural pressure groups, professional educators, politicians, academics and research organisations. One example of a recent type of initiative in Australia is the establishment of the National Centre for Research on Rural Education (NCRRE) at the University of Western Australia. The foundation head of the Centre, Professor Frank Darnell, has suggested four main reasons for the growing interest and debate about rural education[2]:

- a national pride in the Australian outback;
- romanticism associated with an admired independent lifestyle;
- the intensity of natural resource development taking place in many rural regions of the country; and
- widespread acceptance of the concept of equality of educational opportunity.

Problems of small schools

Many small schools have provided, and are still providing, their pupils with excellent opportunities for learning, but it must be acknowledged that there are perennial problems associated with these schools and that existing provisions and conditions fail to deal satisfactorily with many of them. A brief survey of the literature suggests, for example, that small schools, particularly those in rural areas, are faced with several difficulties associated with isolation—geographical, social and professional.

There is usually a high degree of teacher mobility in very small schools and teachers have restricted access to in-service development activities. Special education services and support staff are also limited. In the classroom, the multiple- or composite-grade organisation and the curriculum's lack of relevance to rural conditions cause further problems.

Pupils, too, face particular disadvantage in small isolated schools. They must often face long journeys by bus to get to school and have infrequent contact with their peers in other schools. Low educational aspirations and achievement are not uncommon, and absenteeism is often high.

Queensland's small schools

Social, economic and educational factors have led to a decline in the number of small schools in Queensland, from 900 fifteen years ago to approximately 500 in 1984. Despite consolidation and closures, however, there has been a revival of interest in them and in the quality of the educational services they are providing in rural areas.

A range of influences affect small schools including school size, the level

Staff and pupils at Brighton Hills Provisional School, 1916.

of community involvement, the support service assistance available and the professional training and experience of staff. In addition, few specific curricular provisions and syllabus materials have ever been provided for small schools, and little information is available on the planning behaviours and teaching procedures of their principals and teachers.

The curriculum in small schools

In an attempt to gain information on matters relating to the curriculum in these schools, a recent study[3] looked at curriculum implementation practices in Classes 4 and 5 State primary schools in Queensland country areas. More than 120 principals and teachers from 90 small schools responded to a survey which posed questions about: the ways in which they planned and taught the primary school curriculum; the main influences which affected them in their planning and teaching; and the improvements in curricular and support service provisions they felt were needed for Queensland's small schools.

Planning and teaching

Most of the respondents reported that they were planning and teaching the primary school curriculum in basically formal or traditional ways, and they exhibited a strong preference for organising and teaching curricular content in separate subject areas. Some were making efforts to correlate content across subject boundaries, but very little curriculum integration occurred. The teachers made considerable use of the primary school syllabuses when planning their programs, giving the greatest emphasis to academic subjects (language arts, maths, social studies and science). They also paid particular attention to giving students a solid foundation in the basic skills of reading, writing and computation.

Classroom organisation and management on the whole reflected traditional patterns; students were seated in rows and grouped by common year or age levels, adhering to a set timetable. Teaching methods involved a fairly high degree of teacher control and domination, and didactic teaching predominated. Very few principals or teachers involved parents or the community in planning their programs.

It would seem, then, that many of the unique advantages inherent in the small school are not being used effectively; that, generally, small schools are not implementing programs and policies that capitalise on their strengths. As writers on rural and small schools have suggested[4], these schools would benefit from returning to the rural traditions of individualised instruction and cross-age teaching and from using the local community extensively as a learning resource in historical, sociological, economic and historical investigations. Most rural communities are also endowed with natural environments that schools could use as the basis of curricular materials, for example in outdoor education, science survival skills and physical education.

Main influences

The Queensland teachers found that several factors hindered them in implementing their curricula. The organisational and administrative responsibilities of running the school were time consuming and affected the time available for effective planning and teaching—tasks which already proved difficult because of the composite or multi-grade nature of the classroom. Lack of contact with peers also meant there was little social and professional stimulation.

In these circumstances, the principals and teachers found they had to depend more on their own professional knowledge, skills and training and on the syllabuses prepared by the Education Department. The availability of teaching resources and teacher aides in the school also assumed major importance.

These findings would appear to have a number of implications for the professional training and development of teachers who will teach in small rural or isolated schools. It is apparent that principals and teachers in these schools, particularly new appointees, need to be given the opportunities at both pre- and in-service levels to develop techniques and strategies to enable them to use their time most effectively, as well as learn new skills for coping with multi-grade planning and teaching. They also need to learn ways of handling school organisation and other administrative matters as efficiently as possible.

Some other issues

The teachers and principals raised a number of issues relating to curricular and support service provisions for small schools. A majority mentioned the problems involved in attempting to implement in small schools the syllabuses which had been designed mainly for use in single-grade classes in large schools. For in schools of a multi-grade or composite-grade nature difficulties arise in relation to the sequencing, continuity and scope of the curricular content to be covered.

Although most teachers use the primary syllabuses quite extensively, more than 90 per cent found difficulty in adapting or modifying the syllabuses to meet their instructional needs. But they made some suggestions for overcoming these problems. They would appreciate being given a set of curriculum guidelines for small schools outlining a rationale and set of principles to be considered when implementing the curriculum; they would also like to have the opportunity to take part in regular in-service programs to assist them in adapting and developing their curricula to suit local needs.

What is needed

The Queensland State education system administers a large number of small primary schools scattered throughout an immense expanse of geographic, social and cultural milieux, and it faces considerable difficulties in attempting to service the needs of all institutions. But it does have considerable resources and expertise available. A few decisions made at the appropriate levels could result in actions that would ameliorate at least some of the concerns felt by principals and teachers in the State's small schools.

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Teachers evaluating teachers

Jim Lawson

Increasingly in the 1980s educators concerned with quality education have referred to the need to improve the techniques of teaching, and many researchers have focused their attention on the quality of classroom instruction[1]. From this research it is clear that two ingredients are essential in the quest for improvement in quality:

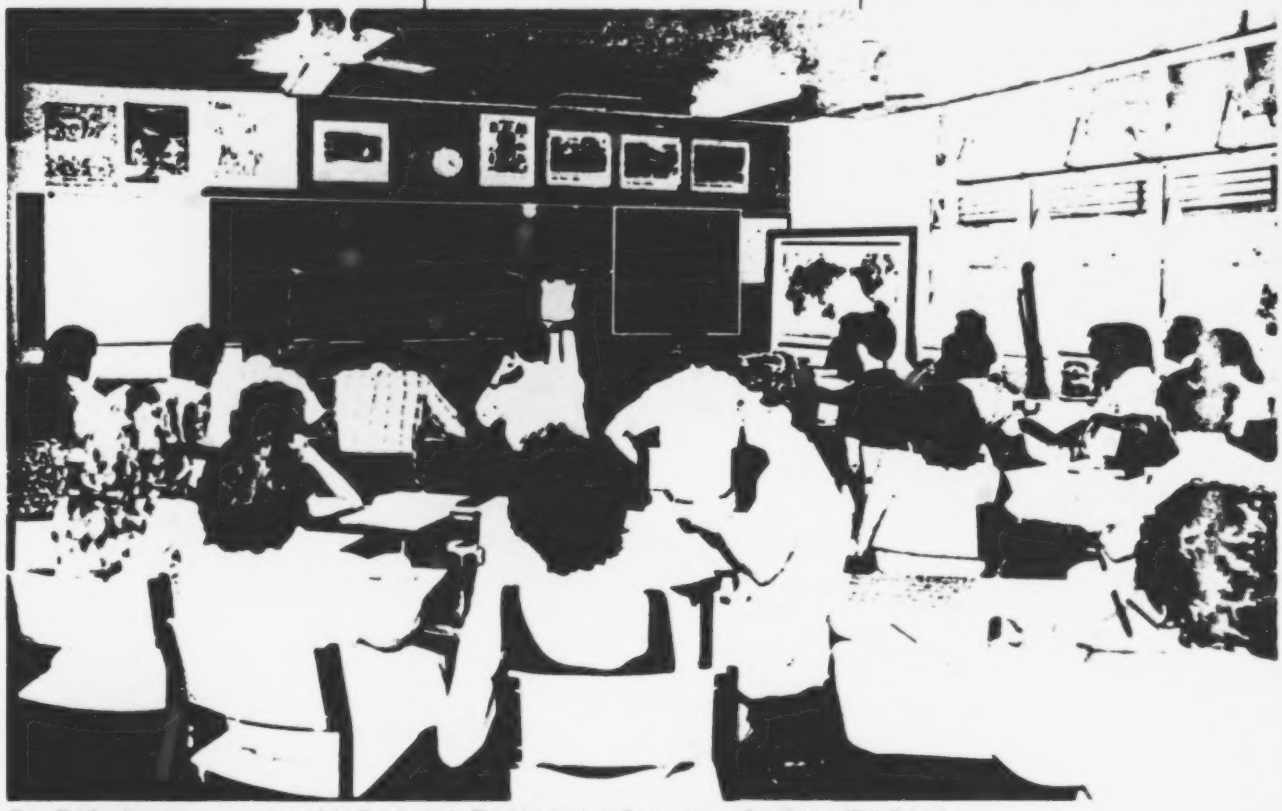
- all teachers need to recognise that their teaching techniques can be improved and that formative evaluation is an acceptable, positive and professional exercise; and
- models that assist in the analysis of the craft of teaching must be readily available for use by all administrators and teachers.

Problems in evaluating teachers

Evaluation is an extremely complex process, for not only are the activities of teaching complex, but both the public and educators continually disagree on what the goals of schools should be. Should the individual teacher be producing a well-educated individual or preparing a student for a special career? In any case, teaching is not a predictable task. There are many routes to a goal; there is no one best way to teach.

Mention of teacher evaluation usually arouses teachers' anxieties, and certainly there are problems associated with evaluating their performance. But the more willing the teacher, the fewer the problems. Teachers in a team situation such as flexible space teaching, for example, have grown accustomed to the scrutiny of their colleagues and usually regard the evaluations of their peers as important, soundly based and accurate[2].

One notable characteristic of both the formative and the summative evaluation of teachers has been that many of those who evaluate do not really know how to analyse what they have seen or how to articulate that analysis to the teacher. There has also been a lack of clearly stated criteria for teachers of what constitutes good teaching. But the publication of an analysis of reports on the study and improvement of American high schools[3], together with an increased output of models of teaching, has gone a long way towards eliminating these problems. In fact the concepts and terms used in relevant research are themselves a valuable set of criteria for teachers, their peers or their superiors to use in



Fran Fairbrother presents a session of the Excellence in Teaching seminar for teachers at Pine Rivers High School.

evaluating teacher effectiveness (see Table 1).

Teaching effectiveness and classroom management

Much of the American research on teaching effectiveness has demonstrated its close correlation with classroom management. In Texas, for example, studies in classroom management and organisation in elementary and junior high schools[4] sought to identify teaching behaviours that contributed to productive learning environments, high levels of student engagement with work, and student achievement. They revealed that good classroom managers planned classroom procedures and rules carefully and in detail, and systematically taught expected behaviours to students. They also encouraged high levels of student accountability for their own work, maintained good management systems, and organised and paced instruction to maximise student task engagement and student success.

Excellence in Teaching

One program concerned with classroom management which originated in America and is now gaining strength in Queensland is the Excellence in Teaching (ET) program. It has some characteristics that are worthy of note when considering the provision and use of models for an analysis of teaching[5]. ET seeks gradual but effective changes over a period of time and aims to raise the process of planning from an intuitive to a more consciously planned level. It looks for clear positive applications that work in the classroom. Research-based principles of teaching are modelled and related to teachers' own styles, and leaders must practise what they preach and not merely pass on information.

These characteristics of the ET program provide a conceptual framework of the development of formative evaluation. Other conditions are also necessary: the evaluator must observe teaching in action and possess the skills to analyse what has occurred; and the evaluation needs to be sustained over a prolonged period[6].

Teachers, principals and assessment

One requirement being put squarely to principals in the United States is that, as the instructional leaders in their schools, they are responsible for the quality of teaching in their buildings. In many districts, therefore, the craft of teaching is being teased apart and principals are attending comprehensive training programs.

THE DADE COUNTY APPROACH

The *Teacher Assessment and Development System (TADS)*[7] of the Dade County Public Schools in Miami, Florida, is a notable example. It has been developed to focus on the continued professional development of teachers, and consists of five documents. *Classroom Assessment Instrument* is a strategy for classroom observation containing assessment items, directions, definitions and ground rules for making an observation; *Prescription for Performance Improvement* provides for the organisation of feedback to teachers and for recording prescriptions for performance improvement; *Interpretive Guide* assists teachers and administrators to understand the meaning of assessment items; *Conference Guide* suggests an approach to be used in presenting data to teachers after an observation and is a resource teachers can use in developing prescriptions for the improvement of teaching skills; and *Prescription Manual* contains suggestions for professional improvement activities in instructional skills for teachers of all abilities.

The *Classroom Assessment Instrument* is designed to facilitate the documentation of six decisions about the level of performance of teachers. The decision categories are: preparation and planning; knowledge of subject matter; classroom management; techniques of instruction; teacher-student relationships; and assessment techniques. Each of these categories is divided into performance characteristics called 'indicators' (see Table 2) and these are further divided into more specific teaching behaviours. Categories are assessed through direct systematic observation.

In all, 69 teaching behaviours are listed, a number that may appal some teachers. But evaluation in this context is not a one-off exercise; it occurs over a period of time, and an improvement exercise might be designed to concentrate only on a certain small number of behaviours.

The really valuable part of the manual for principals is the *Interpretive Guide*; they are not being asked to evaluate without effective guidelines. Teachers, too, are helped to understand the meaning of teaching behaviours. The commentary on the indicator 'Activities are References to Objectives' under the category 'Preparation and Planning', for example, states in part:

> The essence of this statement is a 'match' between the purpose of the lesson and classroom activities. If applicable, activities should incorporate provisions for learners to practise objectives during the lesson. An easy way to assess this characteristic is to compare the verb in the objective with learner behaviour in the lesson; e.g. the objective 'to identify causes of World War I' might be matched to activities where learners read and list factors . . .

EVALUATION IN AUSTIN, TEXAS

Another useful evaluation instrument is The *Developmental Teacher Evaluation Kit (De Tek)*[8] developed at the University of Texas (Austin). *De Tek* provides instruments for gathering data on a teacher's classroom performance. The information obtained is analysed by the teacher and principal in collaboration in order to obtain a profile of the teacher's classroom performance, diagnose the teacher's

Table 1:
Some research terms and their meanings

On-task behaviour: doing what you are supposed to be doing
Procedures: a set of guidelines for doing a regularly occurring task
Rules: definitions of general standards of conduct
Disruptive behaviour: unsanctioned behaviour that interferes with the work of the teacher or more than two other students
Inappropriate behaviour: inattentive behaviour involving only one or two students
Transitions: intervals between academic activities, mainly spent moving from one thing to another
Interruptions: external distracting events; how teachers cope is an important aspect of classroom management
Dead time: an interval of time in which students apparently have no set work to do
Signals: cues used to get students' attention (ideally, consistent and deliberate)

Table 2:
Example of TADS Indicators and Teaching Behaviours
Category 4: Techniques of Instruction

Indicators	Teaching Behaviours Related To Indicator A
A. Instructional Materials and Methods are Appropriate to the Needs and Abilities of the Learners.	A1. Instructional materials are appropriate for the needs and abilities of the learners.
B. Pupil Performance on Learning Objectives is Monitored.	A2. Instructional methods are appropriate for the needs and abilities of the learners.
C. Opportunities are Provided for Verbal Interaction.	A3. Supplemental and/or differentiated materials are used (if needed).
D. Opportunities are Provided for Active Involvement.	A4. Instruction accommodates two or more learning styles.
E. Media are used to Facilitate Instruction OR no Media are Necessary.	
F. Instruction Follows a Sequence.	
G. Clear Explanations and Directions are Provided.	
H. Directions and Explanations are Clarified when Necessary.	

accomplishments and needs, and formulate a growth plan.

The process involves 10 steps including a teachers self-analysis survey, structured classroom observation, more detailed analysis of one to three selected behaviours, growth planning, selected student perceptions, discussion of accomplishments, and further growth planning. Formative evaluation therefore becomes a continuous process. The sequence is flexible. Once the teacher and principal have agreed that there is a specific need they can, for example, move directly to a growth plan.

In-service for principals is an important part of the *De Tek* program. Professor Harris, co-developer of the kit, familiarises them with the documents and presents laboratory simulation with a film. He puts groups of 10 to 12 principals into classrooms to practise using recording sheets and requires them to criticise each other's observations and recordings. He then runs a reliability study on the group. He finds they have most difficulty in developing ability in giving feedback and in developing plans for improvement.

As with *TADS*, the centre piece to *De Tek* is the criteria list. Six Performance Areas have been identified: businesslike; friendly; verbally interesting; stimulating; individual-oriented; and multi-media integrative. The six areas together have 22 related behaviours and each behaviour has four or five indicators associated with it. Each of the indicators (101 in all) is an explicit example of a classroom event or events.

Also as with *TADS*, evaluation is not a one-off exercise and improvement activities might concentrate on only a small number of behaviours.

Following its experience with the *De Tek* system, a Texas school district gave its opinion of the requirements for successful formative evaluation[9]:

> A formative evaluation system needs to be based on the premise that the evaluation of teacher performance is a serious professional undertaking, and that it is the shared responsibility of the teacher and the administration. It assumes that professional teachers can and should improve their job performance, and that they are willing to make a commitment to professional growth.

The Queensland scene

In Queensland, where teachers are being made increasingly aware of the need to improve their teaching techniques as they gain more experience[10], there are encouraging signs that these criteria are being met. Clinical supervision in various forms is taking place in many high schools and, by the end of 1984, up to 45 high schools throughout Queensland will have participated in the full 18-hour ET program. Through these programs considerable numbers of teachers are demonstrating their willingness to work for improvement. Models for effecting this improvement are now available for teachers of all abilities, and it is hoped that before long all teachers will come to agree that formative evaluation has an essential part to play in their professional development.

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Keeping innovation going

Howard Thomas

As teachers and administrators are well aware, the past decade has seen rapid changes in schools, some of it forced on the system as a whole, some of it the result of educators' own desire to improve the quality of education for their students. The innovative activity has not been easy for the professionals involved: it has often called into question their own skills and procedures, forced a reassessment of value positions, demanded more time, and generally been plain hard work.

Teachers and administrators often ask themselves how much change in educational practices has actually resulted from all the activity. To arrive at an answer, they need to consider whether the spirit and core of the innovation has penetrated practice, and whether the innovations were 'institutionalised' to such an extent that the innovative practices continued. The most important consideration of all is the lasting effects the innovation has had on teachers' classroom practices.

Types of innovation

System-wide changes, such as the Radford Scheme and ROSBA and the five-year high school, continue because they are imposed on teachers and administrators whether they like it or not. System-wide introductions of new curricula, at both primary and secondary levels, are roughly in the same category, though teachers' discretionary powers could mean that they are not implementing some curricula as completely as their syllabus documents and sub-committees intend.

A whole range of other innovations very much involve a concept of change in teachers' practices. These fall into three categories: those initiated outside the school and implemented with help and support from external sources; those initiated by individual schools, again with external help and support; and those initiated and supported by the school itself. The success of these innovations can be judged by what happens after the initial period of implementation has passed or when the help and support have been withdrawn. It is therefore crucial to find out what factors determine the continuation or cessation of new practices.

Corbett's research

An American researcher, H. Dickson Corbett, of Research for Better Schools (RBS), a private non-profit educational laboratory in Philadelphia, sought to discover what happened to an introduced change when a school was left to support the change on its own, and also to identify the characteristics of schools which facilitate or hinder the continuation of innovative practices.

Corbett's study[1] involved 14 primary and secondary schools which were

attempting to improve their instructional programs. He approached his research with the belief that new practices would continue only if they were incorporated into rules and operating procedures, if opportunities were provided for discussing and reinforcing the new practices, and if assessments were made of the effectiveness of the change.

His research confirmed these views. The following discussion of his findings could help school personnel become more aware of the factors in their schools that are hindering the successful implementation of their instructional changes.

Factors that encourage continuation

Corbett found that new practices continued in schools which gave staff incentives to persist with them. Both positive incentives, such as verbal encouragement, and negative incentives, such as the risk of poor evaluation, were effective. The involvement of administrators was also vital. In schools where at least one administrator exhibited a keen interest in the innovation and took an active part in seeing that changes were continued, the new practices tended to persist. They also persisted in schools where departments or year-level classes were well integrated, and where teachers planned and evaluated classroom activities together and had opportunities to watch one another teach. The resulting free flow of information provided numerous opportunities for teachers to receive peer recognition for specific practices and this was a very positive incentive. Where such close sub-units existed, administrative incentives were reinforced and new teachers were quickly induced to adopt similar changes. Even where administrative encouragement was absent, the sub-units developed a group commitment to the innovation which enabled the change to continue.

Revising curriculum guides to incorporate the new classroom practices helped ensure the practices would continue and generally brought greater commitment from teachers. Having the guides in written form also meant that the nature of a course depended less on individual teachers, so that transfer of teachers had a less damaging effect on the success of an innovation.

CHECKLIST FOR ADMINISTRATORS

1. Do you know which teachers in your school are involved in innovative activity?
2. Do you talk with teachers about their instructional or classroom activities?
3. Do you compliment teachers on work associated with innovative activity?
4. Do you thank teachers for work associated with innovative activity?
5. Have you publicly talked about innovations and the teachers involved at staff meetings?
6. Have you given innovating teachers the chance to talk at staff meetings about the innovations they are involved with?
7. Do you ensure evaluative activity is built into any innovation undertaken at your school?
8. Have you ensured your staff members have developed skills in school-level evaluation?
9. Do you include information about the progress of innovations and the teacher/s involved with them, in reports you write, or in conversations with Departmental personnel?
10. Do you discuss with teachers implementing new practices their responsibility for the process of that implementation?
11. Do you visit the scene of innovative activity?
12. Do you try to protect staff engaged in innovative activity from transfer?
13. Do you give new staff members full access to documents associated with any innovation with which they will have to become involved in your school?
14. Do you ensure there are adequate resources (time, space, equipment, human) to support any innovation undertaken in your school?
15. Do you allow an innovation to be introduced in your school only if it can be seen to help your school to achieve its goals?

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16. Do you have the school, or its teachers, or yourself, take on new projects whenever the opportunity is there, i.e. are you a 'joiner'?

Factors hindering continuation

A common characteristic of schools where innovation continued was the presence of a high level of communication and co-operation among teachers and between teachers and administrators. Where administrators did not discuss the changes with teachers and left them alone to do their work, on the other hand, the changes usually ceased. In these schools 'budgeting, scheduling, and putting out the daily fires that frequent schools' tended to consume all the administrators' time and they discussed instruction with teachers only when there was some additional pressure to do so. But many teachers felt they would have continued many of the activities if they had been asked occasionally how the new practices were going.

The lack of effective communication among teachers themselves was, however, equally damaging to the success of new initiatives. For it meant that valuable knowledge was not passed on, and teachers did not receive their colleagues' encouragement.

One of Corbett's more interesting findings was that if the principal was a 'joiner', taking on new projects regularly for the school, innovations were more likely to fail. Staff in these schools tended to see the introduction of each new project as meaning previous activities no longer had priority, and stopped implementing them in the classroom.

Assessing improvement

Corbett found that few schools tried the new practices long enough for any true assessment to be made of their effectiveness. True evaluation was undertaken only when there were well-integrated sub-units which made specific decisions about continuation and the use of evaluative data.

The speed at which new practices came and went made it very difficult to measure school improvement in any way, let alone attribute it to the innovative practices. So, unless the new practices were written into the curriculum guidelines, or other sources of incentives were available, potentially useful practices tended to be no more successful than less useful practices.

Keeping innovation going

In the light of these findings Corbett suggests ways of encouraging lasting

CHECKLIST FOR SUBJECT MASTERS AND MISTRESSES

1. Is your subject department a close-knit sub-unit?
2. Do teaching groups within your department plan together?
3. Do teaching groups within your department observe the classroom activities of different members of the groups?
4. Do teaching groups within your department team teach?
5. Do teaching groups within your department evaluate their programs and teaching activity?
6. Do you arrange for your teachers to share with each other information and concerns about their teaching?
7. Do you revise workbooks or other curriculum guides to incorporate new practices being undertaken as part of an innovation?
8. Do you discuss with your teachers the meaning of material and ideas in syllabus documents, and how best to implement them?
9. Do you develop further, and put more emphasis on, the strengths of programs that are revealed by evaluation?
10. Where an innovation is designed as a trial or a pilot, do you become familiar with the means by which that trial will be evaluated, and prepare your teachers to be part of that evaluation activity?
11. Do you let your teachers know what evaluations of innovations have shown?

educational change. Schools and systems, he says, should take into account the availability of incentives that would encourage administrators to allocate time specifically to encouraging teachers; they should seek out, as their initial targets, school sub-units where peer incentives are part of regular routine; and they should take advantage of situations where instructional practices are already closely governed by the curricula.

Though Corbett's findings relate to an American situation, they are equally relevant for Queensland schools. They also provide a useful basis for developing separate checklists for Queensland administrators, subject masters and mistresses, and teachers to use when they are assessing the success of changes to teaching practices or contemplating introducing new changes. The checklists (on pages 46, 47 and 48) will serve as a ready reference to the range of school factors which determine whether innovative practices will continue, and as a guide to what to do and what not to do.

Reference:

1. H. D. Corbett, School Context and the Continuation of Innovative Practices, Paper delivered at the Annual Meeting of the American Educational Research Association, New York, March 1982.

Howard Thomas is a Lecturer in Education Studies at the Brisbane College of Advanced Education, Kelvin Grove Campus.

CHECKLIST FOR TEACHERS

1. Do you talk with your principal and deputies about any project you are involved in?
2. Do you belong to a group of teachers with whom you can identify?
3. Do you talk with other teachers about your teaching activity?
4. Do you document any specific activities and the progress of any innovation you are involved in?
5. Do you accept responsibility for carrying through the implementation of innovations you are involved in?
6. Do you ask other teachers who are involved in an innovation for information about how it is going?
7. Do you encourage other teachers who are involved in an innovation?
8. Are you ready to give an innovation a long enough 'go' for usable evaluative data on its effectiveness to be gathered?
9. Do you possess adequate skills for carrying out school-level evaluation on innovations in which you are involved?
10. Do you put into practice the whole of a curriculum, or do you take bits and pieces of it?
11. Did you take on the innovation along with at least one other teacher, so forming at least the core of a possible network with which to share, support and plan?

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12. Are you willing to take on another innovation project while already engaged in one or more?

Departmental publications

Production and Publishing Services Branch publishes several periodicals for teachers and other educators. Following are brief descriptions of some of them:

Links is a magazine for preschool teachers. It is published six times a year and issued to teachers in the Preschool Division of the Queensland Education Department. Subscription for those who are not members of the Department of Education is $6 per annum.

Links is issued by the Preschool Division, Department of Education, Queensland, PO Box 33 North Quay Q 4000, tel. (07) 224 7866.

Special Education Bulletin (Seb) is published quarterly and issued to Special Education personnel. This journal is of particular interest to teachers, carers and providers of education for children with special needs. The present issue, vol. 26 no. 4, focuses on the diversity of areas covered by the Division of Special Education.

Seb is distributed through the Special Education Co-operative Workshop, Cornwall Street, Annerley, Q 4103, tel. (07) 391 8533.

Impact is compiled in the office of the Co-ordinator of In-service Education (Secondary) and is issued to secondary schools and Departments throughout Queensland. It presents information for teachers on new developments in the classroom. The issue now in preparation focuses on computers in the classroom.

Impact is distributed by the Co-ordinator of In-service Education (Secondary), Bardon Professional Development Centre, 390 Simpson's Road, Bardon, Q 4065, tel. (07) 369 4199.

Education Abstract provides eight pages of abstracts from current journals covering education overseas, education in Australia and professional reading. Compiled expressly for teachers and other educators, it is issued monthly (except for December and January) and distributed through Kenny House, 107 George Street, Brisbane, Q 4000, tel. (07) 224 6028.

Education Statewide is a newspaper, produced monthly (except December and January) by the Queensland Department of Education. It contains news of the people and projects contributing to State education in Queensland and aims to ensure teacher and community awareness of worthwhile educational initiatives from all areas of the State. *Education Statewide* is available to teachers, parents, community groups, libraries and other interested organisations and individuals.

Print and non-print media are invited to use material published in *Education Statewide*. Distribution inquiries should be directed to tel. (07) 224 7978.

BACK PAGE

Congratulations to the winners from *Quest* 36 competitions. The doubled prize money increased the number of entrants, and the competitions in this issue require a little double-think.

55. Write a Caption

Prize-winning caption this time came from Dan Doyle of Cairns West State School with:
Now children, who stole the other part of the car?

56. Newsense Riddles

Judging by the large number of entries, many teachers understand too well the term 'newsense'. The biggest newsense was Judi Fischer of Boondall State School, with:
Who did King Arthur gamble on finding the Holy Grail?
(answer) Sir Lancelotto
Runner-up was Jim Turner of Oxley State School, with:
What was a White Russian fighter?
(answer) Pale chauvinist mig

57. Not Another . . .

An honourable mention goes to Alistair Whittred of Sunnybank State High School for:
Teacher: Today's lesson involves gardening along the school entrance.
Student: Not another road to hoe!
The winners were M. Buzolic and H. Lucas of Bellevue Park State School with:
Teacher: Today's art lesson is macramé.
Student: Knot again!

58. Write a Caption

$10 for the best

59. Catchy Titles

Many organisations publish periodicals with catchy titles based on puns or acronyms associated with the groups' functions, such as the English Teachers Association of Queensland—*Words'Worth*; Counselling, Guidance and Clinical Services, Curriculum Branch, Victoria—*Inter View*; or the Computer Education Group of Queensland—*QUICK* (Queensland Users Interested in Computing for Kids).

Quest competition 59 is for the catchiest title for an educational group's publication, real or imaginary, with a $10 prize for the best.

60. All Greek

(i) (ii) (iii)

The horseshoe with feet is the symbol for an ohm, a rather 'omely Greek character, so: (i) mobile ohm; (ii) ohm stretch; and (iii) ohm sick.
A prize of $10 awaits the cleverest use of any of these Greek characters:

π pi; χ kappa; ν nu.

Conditions and closing date:
In each of the above competitions, brevity and printability are essential. Readers may send as many entries as they wish to any or all of the *Quest* competitions. Entries must be forwarded to the Senior Education Officer, Publishing Services, Production and Publishing Services, Department of Education, PO Box 33, North Quay, Brisbane, Q 4000, to reach him no later than 28 February 1985. Each entry should be on a separate piece of paper, with the competition number and the name and address of the entrant clearly marked. Please make entries N.F.P. if you prefer not to have your name published.